CULTURAL RESOURCES SURVEY OF THE JAMESTOWN 115kV TRANSMISSION PROJECT, BERKELEY COUNTY, SOUTH CAROLINA

Chicora Research Contribution 575

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MANAGEMENT SUMMARY

This report provides the results of a cultural resources investigation of a transmission substation lot and access road in north central Berkeley County, in the vicinity of the Jamestown community. The project site is situated about 19 miles east-northeast of Moncks Corner and about 0.5 mile southeast of Jamestown itself. The study was conducted by Debi Hacker, under the supervision of Dr. Michael Trinkley of Chicora Foundation for Mr. Tommy Jackson of Central Electric Power Cooperative. The work is intended to assist this client comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The property is to be used by Central Electric Power Cooperative for the construction of a new substation lot about 5.6 acres in size adjacent to and southwest of an existing South Carolina Public Service Authority substation. The access road will be immediately adjacent to and northwest of the existing 115kV Pinopolis-Conway transmission line.

The proposed substation lot and access road is in planted pine about 20 years old. There is abundant evidence of silviculture, including ridge and trough plowing throughout the survey area. The proposed work will involve clearing and the construction of the substation and access road. These activities have the potential to affect archaeological and historical sites that may be in the project corridor. For this study an area of potential effect (APE) 100 feet around the proposed substation was assumed.

Berkeley County received two comprehensive architectural and historical surveys, one in 1989 and the other in 1990. In spite of the previous work, no architectural sites have been identified within, or adjacent to, the APE.

An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology failed to identify any previously recorded archaeological sites within the project's APE.

The archaeological study of the substation incorporated shovel tests at 100-foot intervals on transects spaced 100-feet apart. The access road was examined with a single line of shovel tests at 100-foot intervals. A total of 27 shovel tests were examined.

The work the relatively low, wet nature of the soils and the disturbance caused by silvacultural activities. While a few modern items were recovered, the shovel tests failed to reveal any archaeological sites.

A survey of public roads within 100 feet of the survey area was conducted in an effort to identify any architectural sites over 50 years old that also retained their integrity. No structures were found.

It is possible that archaeological remains may be encountered in the project area during construction. Construction crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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Introduction

This investigation was directed by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Tommy L. Jackson of Central Electric Power Cooperative. The work was conducted to assist Central Electric Power Cooperative to comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

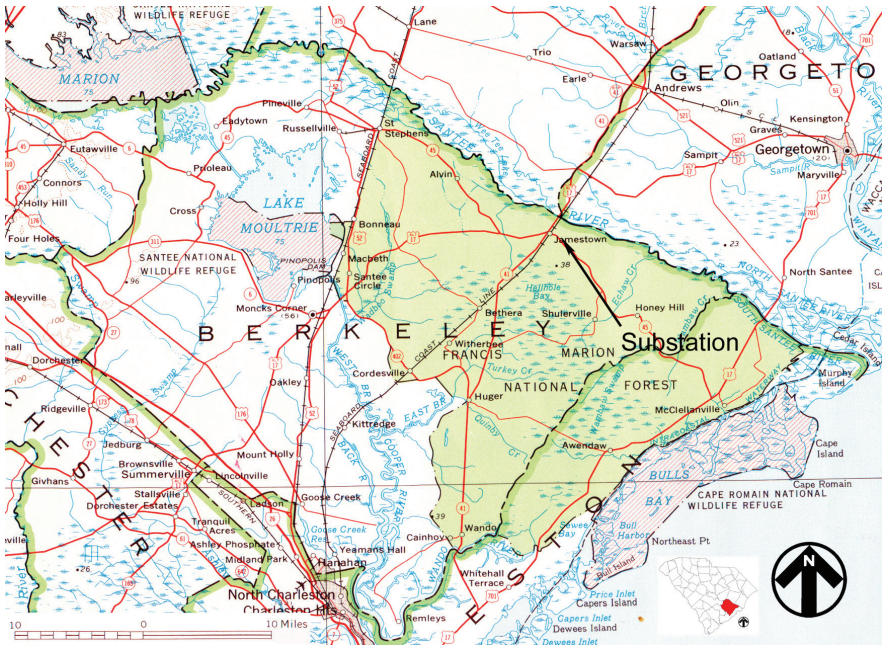


Figure 1. Project vicinity in Berkeley County (base map is USGS South Carolina 1:500,000).

The project site consists of a proposed substation lot and access road north of SC 45 (French Santee Road) in the Jamestown community of north central Berkeley County (Figure 1). The location is about 19 miles east-northeast of Moncks Corner and is largely surrounded by the Francis Marion National Forest. The substation tract and access road encompass about 5.6 acres and the new substation will be situated southwest of an existing South Carolina Public Services Authority substation and the Pinopolis-Conway transmission line. The new access road will parallel the existing transmission line, running northeast from SC 45 about 900 feet (Figure 2).

The proposed substation lot and access road are both level and planted in pines that are about 20 years old. To the north is a large industrial facility and to the southeast is a small development. The area has been flagged, but otherwise no clearing has been conducted.

The proposed parcel, as previously mentioned, is intended to be used as a transmission substation, as well as an access road. There is an existing access road, but it will not be used by the new facility. Construction will require additional land alteration, including additional clearing and grading of the tract. There will likely be fill required, given the low nature of the soils (the existing substation lot has been raised 1-2 feet above grade). The access road may be graded and graveled. Consequently, construction and maintenance of the transmission line may have an impact on historic resources in the project area.

The project will not directly affect any historic structures (since none are located on the

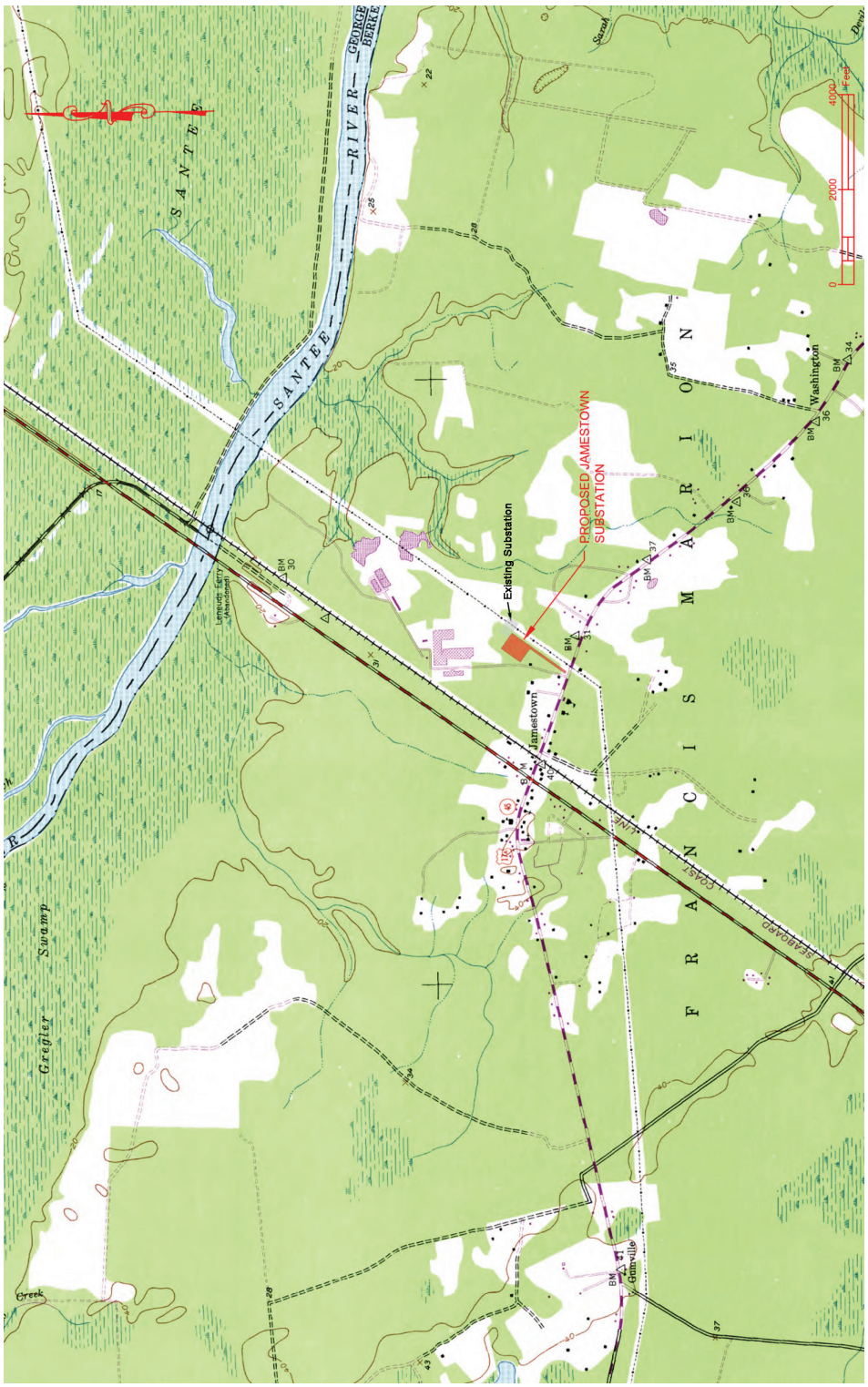


Figure 2. Portion of the 1:24,000 USGS Jamestown 1943 PR73 topographic map showing the project site.

substation parcel), but the completed facility may detract from the visual integrity of historic properties, creating what some consider discordant surroundings. As a result, this architectural survey uses an area of potential effect (APE) 100 feet around the proposed lot. This distance was selected since the proposed substation will be immediately adjacent to the existing lot, as well as the three lines running southwest-northeast through the lot. There is also a large industrial plant (Pulsa, Inc.) to the northwest. As a result, we judge visual intrusion to be of little concern.

Figure 3. Portion of the existing substation lot, with the proposed new substation to the left.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of this portion of Berkeley County.

We were requested by Mr. Tommy L. Jackson of Central Electric Power Cooperative to conduct the cultural resource study in early November 2016, with the field investigations conducted by Debi Hacker and Dr. Michael Trinkley on November 21, 2016. The architectural survey and evaluations were conducted by Dr. Trinkley at this same time.

These investigations incorporated a review of ArchSite and the site files at the South Carolina Institute of Archaeology and Anthropology. As a result of that work, no previously recorded archaeological sites were identified within or adjacent to the APE. An initial reconnaissance architectural survey for Berkeley (Preservation Consultants, Inc. 1989) was followed by a comprehensive survey (Preservation Consultants and Stockton 1990). No architectural sites have been identified with the APE.

The closest architectural site, about 1,700 feet southwest of the project, was 250 0012, a ca. 1935 structure. This building, however, had been removed by 2004. An eligible resource, the Jamestown Grammar School, 250 0009, originally located about 2,400 feet to the southwest, was also removed by 2004.

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files and at the South Caroliniana Library.

The archaeological survey identified no archaeological sites within the 5.6-acre parcel. The architectural survey of the APE, designed to identify any structures over 50 years in age that retain their integrity and that are potentially eligible for the National Register of Historic Places revealed no such structures.

Report production was conducted at Chicora's laboratories in Columbia, South Carolina on November 23-25, 2016. The only photographic materials associated with this project are digital and will be retained by Chicora Foundation.

Environmental Background

Physiography and Geology

Berkeley County is situated in the lower Atlantic Coastal Plain of South Carolina. Containing about 1,100 square miles, it is bordered by Georgetown County to the northeast, Charleston County to the southeast and southwest, Dorchester County to the west, Orangeburg County to the northwest, and Clarendon and Williamsburg counties to the north.

The topography of the county is characterized by subtle undulations characteristic of beach ridge plains. The elevations range from sea level to approximately 105 feet above mean sea level (AMSL). The elevation in the project area ranges from about 37 to 39 feet AMSL.

Berkeley is drained by three significant river systems: the Santee, Wando, and Cooper rivers. The Santee has a large freshwater discharge and forms the northern boundary with neighboring Georgetown County. The Wando is a coastal river and is dominated by tidal action. The Cooper River, which flows through the center of the County, was also originally a tidal river, but has been modified by a large volume of fresh water diverted from the Santee through Lakes Marion and Moultrie. In addition, there are a number of broad, low gradient interior drainages that are present either as extensions of tidal streams or flooded bays and swales (Long 1980).

Surface soils are almost entirely sedimentary and were transported into the area from other places. The geology of Berkeley County is characteristic of the region with sands, clays, gravels, and phosphates covering the surface dating to the Pleistocene (Long 1980).

Soils

Only three soil types are found in project area. The substation is composed almost exclusively of Craven loams. These soils are formed in clayey Coastal Plain sediments. While not prone to flooding, they have a water table that is 2-3 feet below the surface and the soils are reduced. The surface soils are dark gray loams about 0.2 foot in depth overlying pale brown silt loams about 0.4 foot in depth. Below this is a firm clay (Long 1980:16).

The access road is primarily composed of Duplin fine sand loams. Like the Craven soils, the Duplin series is formed in clayey Coastal Plain sediments. They have a similar water table. Their profiles are also similar, although deeper. The surface layer is a grayish brown fine sandy loam about 0.5 foot in depth. Below is a yellowish brown, firm clay loam to a depth of about 1.5 feet. This rests on a yellowish brown firm clay.

Also present on the access road, but in only small amounts, is Wahee loam. These soils are poorly drained, with a water table within the upper foot. The typical profile reveals about 0.4 foot of very dark gray loam over a thin layer of light yellowish brown clay loam. Below this to a depth of 1.1 feet is a mottled grayish brown firm silty clay loam.

Climate

Berkeley County has a subtropical climate, characterized by warm summers, mild winters, and adequate precipitation fairly evenly spread throughout the year. Except in the summer, when maritime tropical air controls the climate of the area, the daily weather patterns are controlled

by west to east moving pressure systems and associated fronts.

Yearly precipitation averages 47 inches, but ranges from 39 to 55 inches (Long 1980). The growing season, from April to September, receives an average of 31 inches or about 66% of the yearly total. The average length of the freeze-free growing season is approximately 260 days, although frosts can occur as early as October 26 and as late as April 15 (Long 1980).

Mills remarked in 1826 that Carolina was similar to European climates, lying at a similar latitude. He noted that:

> in comparing the climate of South Carolina, with similar climates in Europe, we find it lying under the same atmospheric influences with Aix, Rochelle, Montpelier, Lyons, Bordeaux, and other parts of France; with Milan, Turin, Padua, Mantua, and other parts of Italy (Mills 1972[1826]).

The coastal region is a moderately high risk zone for tropical storms, with 169 hurricanes being documented from 1686 to 1972 (0.59 per year) (Mathews et al. 1980). One of the most devastating in the eighteenth century was the hurricane of September 15, 1752. One report listed 92 people drowned, although the death toll, especially among the African American slaves, was likely much higher. The storm also had considerable long-term effects. Calhoun notes:

> the destruction of trees was severe; one plantation owner's loss was assessed at $50,000 and many of those trees which survived were "heart-shaken," and unfit for use. Crops were even more damaged as the storm followed a severe drought. It was necessary to enact laws to regulate the exportation and sale of corn, "Peafe," and small rice, so that "the poor may be able to purchase Provisions at a moderate Price" (Calhoun 1983).

Floristics

Speaking of the coastal plain, Braun observed that:

> the vegetation of this region is in part warm temperate-subtropical, in part distinctively coastal plain, and in part temperate deciduous. It is made up of widely different forest communities – coniferous, mixed coniferous and hardwood, deciduous hardwood, and mixed deciduous and broad-leaved evergreen hardwood -- interrupted here and there by swamps, bogs, and prairies. The large number of unlike communities is related to the diverse environmental conditions of the region (Braun 1950).

Indeed, an examination of the region around Berkeley County reveals tremendous diversity. One detailed study revealed a mosaic including the oak-hickory-pine forest common to upland areas, oak-gum-bald cypress forest typical of southern floodplains, pine forests found in mesic to xeric upland sites, mesophytic broadleaved forests on more mesic slope sites, old rice fields, and a variety of swamp forests such as the tupelo-cypress, low hardwood, and ridge hardwoods (Federal Power Commission 1977). All of these forest types have different dominants and different understory vegetation (see Barry 1980).

Whatever might have existed in the survey area has been replaced by planted pines, creating a monotonous landscape. The area has received mechanical site preparation, including what is known as "bedding." Bedding is most often used in flatwoods or other poorly drained sites such as the project area. A special bedding harrow is used to produce a raised bed on which seedlings may be

Figure 4. Proposed substation site showing bedding or ridges on which the pines have been planted. Between them are troughs.

planted. The objective is to raise the seedlings' roots above the water level. Bedding improves the drainage and makes planting easier. Since bedding requires a site relatively free of debris, it is usually preceded by shearing, root raking, and disking – all activities that can significantly compromise any archaeological resources.

Prehistoric and Historic Synthesis

Prehistoric Overview

The Paleoindian period, lasting from 12,000 to 8,000 B.C., is evidenced by basally thinned, side notched projectile points; fluted, lanceolate projectile points; side scrapers; end scrapers; and drills (Coe 1964; Michie 1977; Williams 1965). The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented towards the exploitation of now extinct mega fauna" (Michie 1977:124).

Unfortunately, little is known about Paleoindian subsistence strategies, settlement systems, or social organization. Generally, archaeologists agree that the Paleoindian groups were at a band level of society (see Service 1966), were nomadic, and were both hunters and foragers. While population density, based on the isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

The Archaic period, which dates from 8000 to 2000 B.C., does not form a sharp break with the Paleoindian period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited mammal. The chronology established by Coe (1964) for the North Carolina Piedmont may be applied with little modification to the South Carolina coastal plain and piedmont. Archaic period assemblages, exemplified by corner notched and broad stem projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

In the Coastal Plain of the South Carolina there is an increase in the quantity of Early Archaic remains, probably associated with an increase in population and associated increase in the intensity of occupation. While Hardaway and Dalton points are typically found as isolated specimens along riverine environments, remains from the following Palmer phase are not only more common, but are also found in both riverine and interriverine settings. Kirks are likewise common in the coastal plain (Goodyear et al. 1979).

The two primary Middle Archaic phases found in the coastal plain are the Morrow Mountain and Guilford (the Stanly and Halifax complexes identified by Coe are rarely encountered). Our best information on the Middle Woodland comes from sites investigated west of the Appalachian the Little Tennessee River Valley. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and South Carolina, where axes, choppers, and ground and polished stone tools are very rare.

The Late Archaic is characterized by the appearance of large, square stemmed Savannah River projectile points (Coe 1964). These people continued the intensive exploitation of the uplands much like earlier Archaic groups. The bulk of our data for this period, however, comes from work in the Uwharrie region of North Carolina.

The Woodland period begins by definition with the introduction of fired clay pottery about

2000 B.C. along the South Carolina coast (the introduction of pottery, and hence the beginning of the Woodland period, occurs much later in the Piedmont of South Carolina). It should be noted that many researchers call the period from about 2500 to 1000 B.C. the Late Archaic because of a perceived continuation of the Archaic lifestyle in spite of the manufacture of pottery. Regardless of terminology, the period from 2500 to 1000 B.C. is well documented on the South Carolina coast and is characterized by Stallings (fiber tempered) pottery (see Figure 5 for a synopsis of Woodland phases and pottery designations). The subsistence economy during this early period was based primarily on deer hunting and fishing, with supplemental inclusions of small mammals, birds, reptiles, and shellfish.

Like the Stallings settlement pattern, Thom's Creek sites are found in a variety of environmental zones and take on several forms. Thom's Creek sites are found throughout the South Carolina Coastal Zone, Coastal Plain, and up to the Fall Line. The sites are found into the North Carolina Coastal Plain, but do not appear to extend southward into Georgia.

In the Coastal Plain drainage of the Savannah River there is a change of settlement, and probably subsistence, away from the riverine focus found in the Stallings Phase (Hanson 1982:13; Stoltman 1974:235 236). Thom's Creek sites are more commonly found in the upland areas and lack evidence of intensive shellfish collection. In the Coastal Zone large, irregular shell middens, small, sparse shell middens; and large "shell rings" are found in the Thom's Creek settlement system.

The Deptford phase, which dates from 1100 B.C. to A.D. 600, is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. The Deptford settlement pattern involves both coastal and inland sites.

Inland, sites such as 38AK228 W, 38LX5, 38RD60, and 38BM40 indicate the presence of an extensive Deptford occupation on the Fall Line and the Coastal Plain, although sandy, acidic soils preclude statements on the subsistence base (Anderson 1979; Ryan 1972; Trinkley 1980b). These interior or upland Deptford sites, however, are strongly associated with the swamp terrace edge, and this environment is productive not only in nut masts, but also in large mammals such as deer. Perhaps the best data concerning Deptford "base camps" comes from the Lewis West site (38AK228 W), where evidence of abundant food remains, storage pit features, elaborate material culture, mortuary behavior, and craft specialization has been reported (Sassaman et al. 1990:96 98).

Throughout much of the Coastal Zone and Coastal Plain north of Charleston, a somewhat different cultural manifestation is observed, related to the "Northern Tradition" (e.g., Caldwell 1958). This recently identified assemblage has been termed Deep Creek and was first identified from northern North Carolina sites (Phelps 1983). The Deep Creek assemblage is characterized by pottery with medium to coarse sand inclusions and surface treatments of cord marking, fabric impressing, simple stamping, and net impressing. Much of this material has been previously designated as the Middle Woodland "Cape Fear" pottery originally typed by South (1976). The Deep Creek wares date from about 1000 B.C. to A.D. 1 in North Carolina, but may date later in South Carolina. The Deep Creek settlement and subsistence systems are poorly known, but appear to be very similar to those identified with the Deptford phase.

The Deep Creek assemblage strongly resembles Deptford both typologically and temporally. It appears this northern tradition of cord and fabric impressions was introduced and gradually accepted by indigenous South Carolina populations. During this time some groups continued making only the older carved paddle stamped pottery, while others mixed the two styles, and still others (and later all) made exclusively cord and fabric stamped wares.

The Middle Woodland in South Carolina is characterized by a pattern of settlement mobility

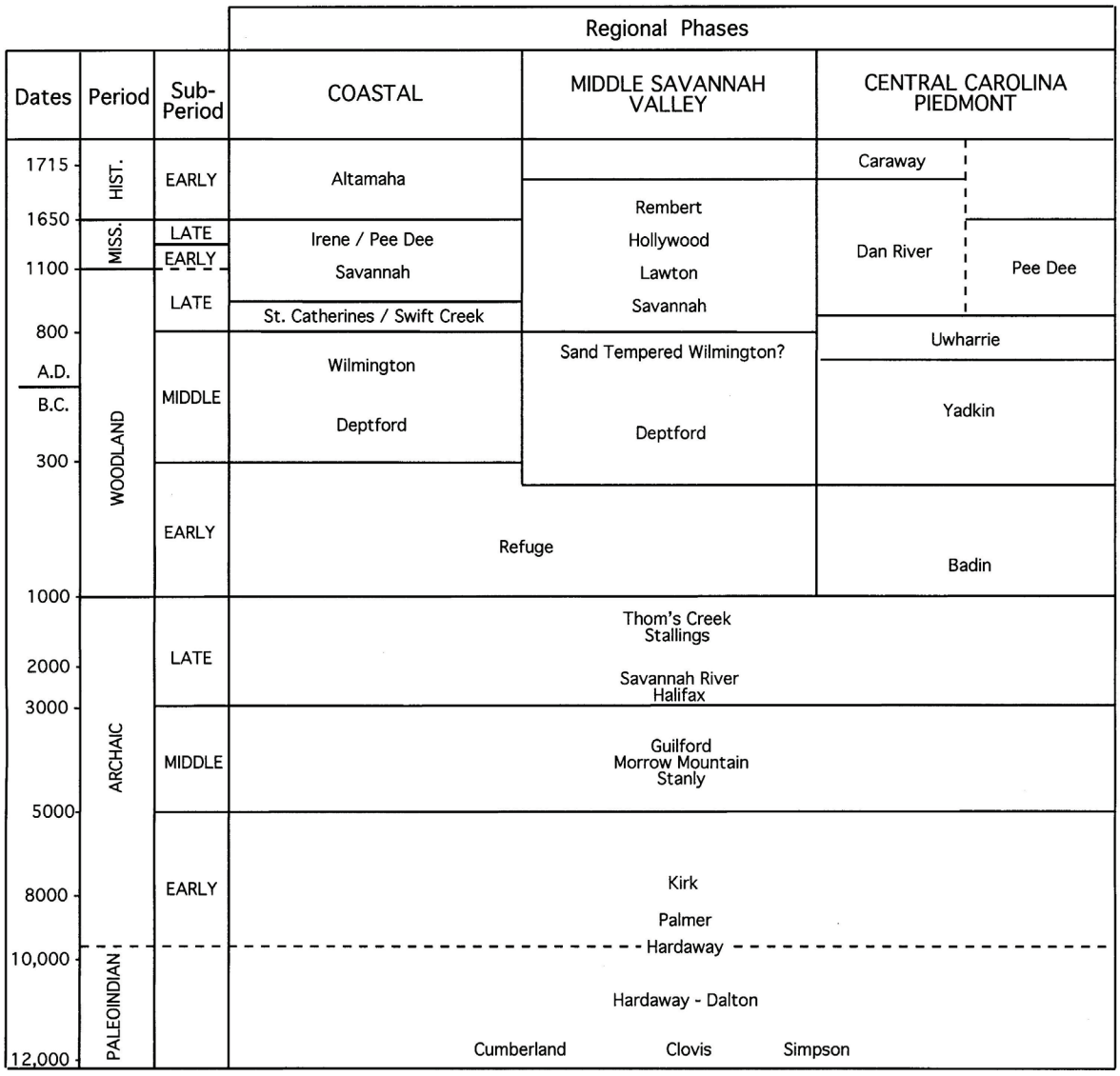


Figure 5. Generalized cultural sequences for South Carolina.

and short term occupation. On the southern coast it is associated with the Wilmington phase, while on the northern coast it is recognized by the presence of Hanover, McClellanville or Santee, and Mount Pleasant assemblages. The best data concerning Middle Woodland Coastal Zone assemblages comes from Phelps' (1983:32 33) work in North Carolina. Associated items include a small variety of the Roanoke Large Triangular points (Coe 1964:110 111), sandstone abraders, shell pendants, polished stone gorgets, celts, and woven marsh mats. Significantly, both primary inhumations and cremations are found.

On the Coastal Plain of South Carolina, researchers are finding evidence of a Middle Woodland Yadkin assemblage, best known from Coe's work at the Doerschuk site in North Carolina

(Coe 1964:25 26). Yadkin pottery is characterized by a crushed quartz temper and cord marked, fabric impressed, and linear check stamped surface treatments. The Yadkin ceramics are associated with medium sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least A.D. 300 coexisted with this Triangular Tradition. The Yadkin series in South Carolina was first observed by Ward (1978, 1983) from the White's Creek drainage in Marlboro County, South Carolina. Since then, a large Yadkin village has been identified by DePratter at the Dunlap site (38DA66) in Darlington County, South Carolina (Chester DePratter, personal communication 1985) and Blanton et al. (1986) have excavated a small Yadkin site (38SU83) in Sumter County, South Carolina. Research at 38FL249 on the Roche Carolina tract in northern Florence County revealed an assemblage including Badin, Yadkin, and Wilmington wares (Trinkley et al. 1993:85-102). Anderson et al. (1982:299 302) offer additional typological assessments of the Yadkin wares in South Carolina.

Over the years the suggestion that Cape Fear might be replaced by such types as Deep Creek and Mount Pleasant has raised considerable controversy. Taylor, for example, rejects the use of the North Carolina types in favor of those developed by Anderson et al. (1982) from their work at Mattassee Lake in Berkeley County (Taylor 1984:80). Cable (1991) is even less generous in his denouncement of ceramic constructs developed nearly a decade ago, also favoring adoption of the Mattassee Lake typology and chronology. This construct, recognizing five phases (Deptford I - III, McClellanville, and Santee I), uses a type variety system.

Regardless of terminology, these Middle Woodland Coastal Plain and Coastal Zone phases continue the Early Woodland Deptford pattern of mobility. While sites are found all along the coast and inland to the Fall Line, shell midden sites evidence sparse shell and artifacts. Gone are the abundant shell tools, worked bone items, and clay balls. Recent investigations at Coastal Zone sites such as 38BU747 and 38BU1214, however, have provided some evidence of worked bone and shell items at Deptford phase middens (see Trinkley 1990).

In many respects the South Carolina Late Woodland may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500 to 700 years (cf. Sassaman et al. 1990:14 15). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

The South Appalachian Mississippian Period (ca. A.D. 1100 to 1640) is the most elaborate level of culture attained by the native inhabitants and is followed by cultural disintegration brought about largely by European disease. The period is characterized by complicated stamped pottery, complex social organization, agriculture, and the construction of temple mounds and ceremonial centers. The earliest phases include the Savannah and Pee Dee (A.D. 1200 to 1550).

Historic Overview

The English established the first permanent settlement in what is today South Carolina in 1670 on the west bank of the Ashley River. Like other European powers, the English were lured to the New World for reasons other than the acquisition of land and promotion of agriculture. The Lord Proprietors, who owned the colony until 1719-1720, intended to discover a staple crop whose marketing would provide great wealth through the mercantile system.

By 1680 the settlers of Albemarle Point had moved their village across the bay to the tip of the peninsula formed by the Ashley and Cooper rivers. This new settlement at Oyster Point would become modern day Charleston. The move provided not only a more healthful climate and an area of better defense, but:

> [t]he cituation of this Town is so convenient for public Commerce that it rather seems to be the design of some skillful Artist than the accidental position of nature (Mathews 1954:153).

The early settlers of the Carolina colony came from other mainland colonies, England, and the European continent. But the future of Carolina was largely directed by the large number of colonists from the English West Indies. This Caribbean connection has been discussed by Waterhouse (1975), who argues that the Caribbean immigrants were largely from old families of economic and political prominence, which formed the Barbados elite. Waterhouse observes that while elsewhere in the American colonies the early settled families were displaced from their established positions of power and economic superiority by newcomers, this did not occur in South Carolina. In Carolina,

> a relatively large proportion of those who, in the middle of the eighteenth century, were among the wealthier inhabitants, were descended from those families who had arrived in the colony during the first twenty years of its settlement (Waterhouse 1975).

This immigration turned out to be a significant factor in the stability and longevity of South Carolina's colonial elite. It also firmly established the foundations of slavery and cash crop plantations.

Many of these Barbadian immigrants settled in the Goose Creek area, southeast of the survey corridor, forming one of the most influential political and economic groups in the colony (Stoney 1938). The "Goose Creek Men" included individuals such as Maurice Mathews, James Moore, and John Boone. They favored increased Indian slavery, trade with the pirates or privateers that sailed the Carolina coast, and generally ignored the efforts of the Lords Proprietors to control the Colony's economic and political future. While the political power of the Goose Creek faction peaked in the 1720s, it continued to evidence considerable economic power well into the late 1740s (see Morgan 1980; Sirmans 1966).

Early agricultural experiments, which involved olives, grapes, silkworms, and oranges, were less than successful. While the Indian trade was profitable to many of the Carolina colonies, it did not provide the Proprietors with the wealth they were expecting from the new colony. This trade was also limited since the Indian population was so dramatically reduced by European disease, the sale of alcohol, and slavery.

Cattle raising was also an easy way to exploit the region's land and resources, offering a relatively secure return for very little capital investment. Few slaves were necessary to manage the herd. The mild climate of the low country made winter forage more abundant and winter shelters unnecessary. The salt marshes on the coast, useless for other purposes, provided excellent grazing and eliminated the need to provide salt licks. More interior swamps found similar vegetation and provided a constant water supply (Coon 1972; Dunbar 1961). Production of cattle, hogs, and sheep quickly outstripped local consumption and by the early eighteenth century, beef and pork were principal exports of the Colony to the West Indies (Ver Steeg 1975). This allowed the ties between Carolina and the Caribbean to remain strong and provided essential provisions to the large scale, single crop plantations.

Rice and indigo both competed for the attention of Carolina planters. Although introduced at least by the 1690s, rice did not become a significant staple crop until the early eighteenth century. At that time, it not only provided the Proprietors with the economic base that the mercantile system required, but it formed the basis of South Carolina's plantation system – slavery.

South Carolina's economic development

during the pre-Revolutionary War period involved a complex web of interactions between slaves, planters, and merchants. By 1710, slaves were starting to be concentrated on a few, large slave-holding plantations. By the close of the eighteenth century some South Carolina plantations had a ratio of slaves to whites that was 27:1 (Morgan 1977). And by the end of the century, over half of eastern South Carolina's white population held slaves. With slavery came, to many, unbelievable wealth. Coclanis notes that:

> on the eve of the American Revolution, the white population of the low country was by far the richest single group in British North America. With the area's wealth based largely on the expropriation by whites of the golden rice and blue dye produced by black slaves, the Carolina low country had by 1774 reached a level of aggregate wealth greater than that in many parts of the world today. The evolution of Charleston, the center of the low-country civilization, reflected not only the growing wealth of the area but also its spirit and soul (Coclanis 1989).

Only certain areas of the low country, however, were suitable for rice production. During the early years, rice was grown as an upland crop, in small fields adjacent to freshwater streams where water could be easily impounded and applied to the crop. By the early 1700s, planters found that upland swamps, such as those in the Goose Creek area, were even better suited for rice, although the soils were quickly exhausted (Meriwether 1940; Sellers 1934). These upland swamps, distinct from well-drained uplands, remained the focus of Carolina rice agriculture during the entire Colonial period.

Hewat, writing in 1779, describes the process of upland swamp rice cultivation:

> after the planter has obtained his tract of land, and built a house upon it, he then begins to clear his field of that load of wood with which the land is covered. Having cleared his field, he next surrounds it with a wooded fence, to exclude all hogs, sheep, and cattle from it. This field he plants with rice . . . year after year, until the lands are exhausted, or yield not a crop sufficient to answer his expectations. Then it is forsaken, and a fresh spot of land is cleared and planted, which is also treated in like manner, and in succession forsaken and neglected (Hewat 1836).

This rather simplistic commentary failed to observe the engineering feat that upland swamp rice cultivation really was. Clearing, which alone was a monumental undertaking, was followed by the construction of dams, dikes, and trenches. By one estimate, a 500-acre rice field required 60 miles of dikes and ditches (Gunn 1976). Fields were carefully leveled to ensure that they could be completely covered by water. Rice was planted during two periods – March 10 to April 10 and June 1 to June 10 – avoiding may since vast migrations of "rice birds" passed through the state during that period and could destroy a crop. Rice was harvested in late August.

By 1730 the majority of the population of the colony, both rural and urban, was black (Wood 1974). By 1850, 46% of Charleston District's population (which included today's Berkeley County) consisted of African-American slaves (DeBow 1854), although Hilliard (1984) indicates that more than 60% of the Charleston slaveholders by 1860 owned fewer than 10 slaves. Regardless, there remained vast plantations where the owner's wealth was achieved by the labor of black slaves.

During the eighteenth century, the profits

to be gained from rice were extraordinary, ranging from 12% to nearly 28% net return on the investment, well exceeding other cash crops such as tobacco or indigo (see Coclanis 1989). Charleston was the mecca around which the economic, political, and social world of Carolina revolved. Charleston provided the essential opportunity for conspicuous consumption, a mechanism that allowed the display of wealth accumulated from the plantation system.

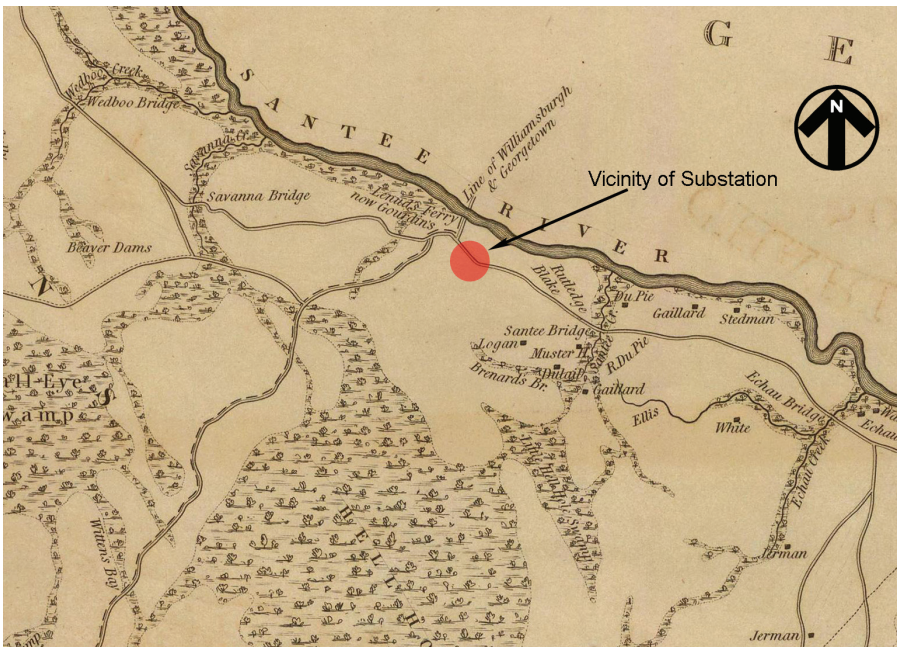


Figure 6. Portion of Mills' *Atlas* of 1825 showing the project area.

By the end of the eighteenth century and the beginning of the nineteenth century, the rate of return on rice had been reduced, at best, to about 2% and many years the rate of return was a staggering –3% to –7%. In 1859, just before the start of the Civil War, the return is reported to have been –28%. As Coclanis observes:

> the economy of the South Carolina low country collapsed in the nineteenth century. Collapse did not some suddenly – many feel, for example, that the area's "golden age" lasted until about 1820 – but come it did nonetheless. By the late nineteenth century it was clear that the forces responsible for the area's earlier dynamism had been routed, the dark victory of economic stagnation virtually complete (Coclanis 1989).

It was the demise of these areas that facilitated the growth of the town of Summerville in 1831, located southwest of the survey corridor. The town of Summerville was established when the railroad company laid out 300 acres of town lots for sale (Charleston Courier 8/20/1831). Summerville was mainly settled by planters from the area who built houses and summer settlements there. Mills' Atlas, showing the Charleston District (which contained the current project area) in 1825, fails to show any settlements in the project area (Figure 6).

By 1832, Summerville had grown to the extent that the area was referred to as an "Old Summerville" and a "New Summerville" when the S.C. Canal and Railroad Company began building a railroad line (Walker 1941). Growth in the general area prompted the creation of new counties such as Colleton County in 1800 and Dorchester County in 1897. The area of Charleston District that contained the project corridor became Berkeley County in 1882.

The 1900 to 1962 Map of Berkeley and Parts of Charleston and Dorchester Counties fails to show who owned the portion of property that contains the project area (Figure 7). Given that it

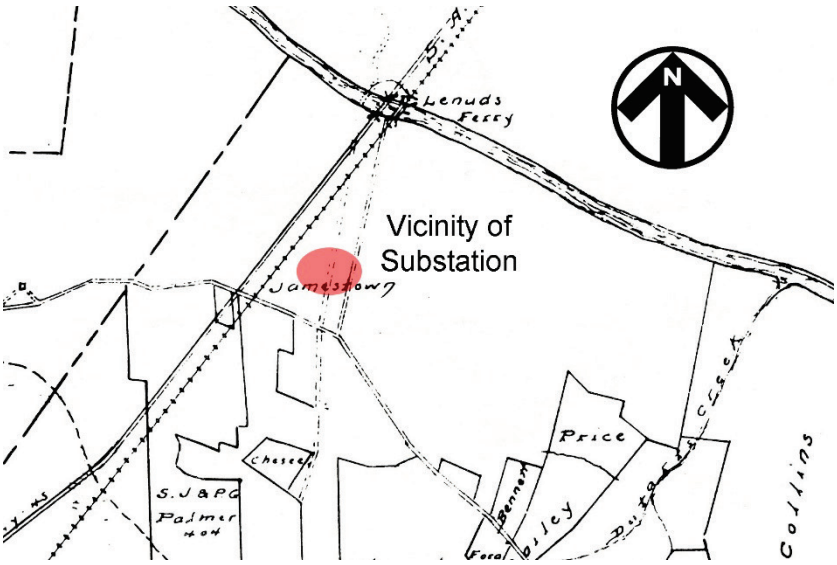
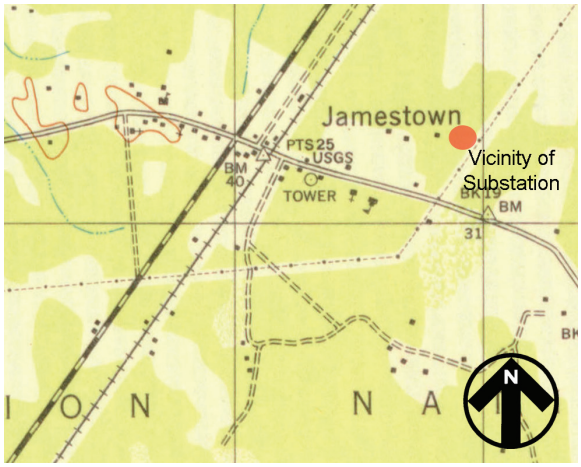


Figure 7. A portion of Gaillard's *Map of Berkeley and Parts of Charleston and Dorchester Counties*, 1900-1962.

was prime swamp forest, it is likely that it was being operated (if not owned) by a timber company). The map also shows two routes to Lenuds Ferry. Crossing the river at this location, however, was US 17 and also the Southern Air Line Railroad.



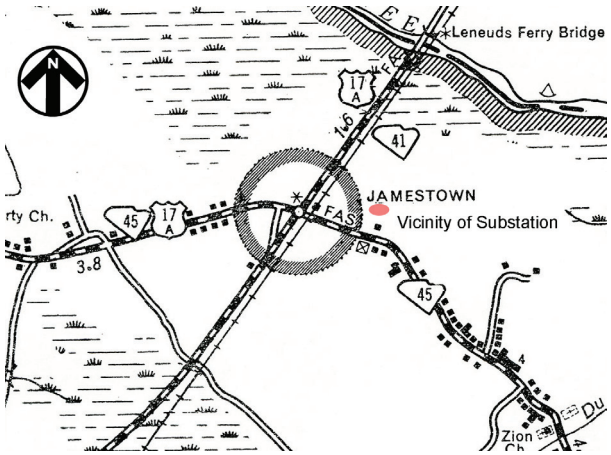


Figure 8. Mid-twentieth century maps of the area. On the left is the 1943 War Department *Jamestown* topographic sheet. On the right is the 1951 *General Highway and Transportation Map of Berkeley County*.

The 1943 *Jamestown* War Department map reveals that the initial power line has been constructed by this time, but otherwise there does not appear to be any activity in the proposed substation area. Shortly thereafter, the 1951 General Highway and Transportation Map of Berkeley County shows essentially the same features, but with less detail. In fact, the only structure shown for Jamestown, was the rail station (Figure 8).

Previous Investigations

Berkeley County has received a significant amount of archaeological attention. Nevertheless, examination of ArchSite identified no previously recorded archaeological sites in the 100-foot diameter APE.

Berkeley County has had both a reconnaissance and comprehensive survey (Preservation Consultants 1989; Preservation Consultants and Stockton 1990). In spite of this, no architectural sites were identified within or even adjacent to the substation site or access road.

Methodology and Results

Archaeological Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100-foot intervals on transects every 100 feet across the substation lot and along the center-line of the access road.

All soil would be screened through ¼-inch mesh, with each test numbered sequentially along the corridor. Each test would measure about 1-foot square and would normally be taken to a depth of at least 1.0 foot or until subsoil was encountered. All cultural remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of three or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. For small or very recent sites these tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. For larger sites or sites where we felt there was a potential for National Register eligibility, shovel tests would incorporate the entire site within the project corridor. Again, shovel tests would be placed at 25 to 50 foot intervals. We are precluded from examining areas outside the corridor by the easements obtained by Central Carolina Power Cooperative.

The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigator.

This strategy was implemented with no substantive changes. The northeastern portion of the substation lot was found to be within the cleared right-of-way of the existing power line, so shovel testing was not conducted in this area. It, was, however, walked and no cultural remains were identified.

The GPS positions were taken with a WAAS enabled Garmin 76 rover that tracks up to twelve satellites, each with a separate channel that is continuously being read. The benefit of parallel channel receivers is their improved sensitivity and ability to obtain and hold a satellite lock in difficult situations, such as in forests or urban environments where signal obstruction is a frequent problem. This was a vital concern for the study area.

Architectural Survey

As previously discussed, we elected to use a 100-foot area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects that appeared to have been constructed before 1950. Typical of such projects, this survey recorded only those which have retained "some measure of its historic integrity" (Vivian 2001:5) and which were visible from public roads.

For each identified resource we would complete a Statewide Survey Site Form and at least two representative photographs were taken. The Survey Staff of the S.C. Department of Archives and History would assign permanent control numbers

at the conclusion of the study. The Site Forms for the resources identified during this study would be submitted to the S.C. Department of Archives and History.

Site Evaluation

Archaeological sites will be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places are described by 36CFR60.4, which states:

> the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> a. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> b. that are associated with the lives of persons significant in our past; or
>
> c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> d. that have yielded, or may be likely to yield, information important in prehistory or history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as ceramics, lithics, and subsistence remains, architectural remains, or sub-surface features;

- identification of the historic context applicable to the site, providing a framework for the evaluative process;

- identification of the important research questions the site might be able to address, given the data sets and the context;

- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and

- identification of important research questions among all of those that might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on an archaeological site's ability to address significant research topics within the context of its available data sets.

For architectural sites the evaluative

Figure 9. Plan of the substation lot and access road showing the approximate location of shovel tests.

process was somewhat different. Given the relatively limited architectural data available for most of the properties, we focus on evaluating these sites using National Register Criterion C, looking at the site's "distinctive characteristics." Key to this concept is the issue of integrity. This means that the property needs to have retained, essentially intact, its physical identity from the historic period.

Particular attention would be given to the integrity of design, workmanship, and materials. Design includes the organization of space, proportion, scale, technology, ornamentation, and materials. As *National Register Bulletin* 36 observes, "Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact" (Townsend et al. 1993:18). Workmanship is evidence of the artisan's labor and skill and can apply to either the entire property or to specific features of the property. Finally, materials – the physical items used on and in the property – are "of paramount importance under Criterion C" (Townsend et al. 1993:19). Integrity here is reflected by maintenance of the original material and avoidance of replacement materials.

Laboratory Analysis

The cleaning and analysis of artifacts that might be collected would be conducted in Columbia at the Chicora Foundation laboratories. Any such materials will be catalogued and accessioned for curation at the South Carolina Institute of Archaeology and Anthropology, the closest regional repository. The site forms for the

identified archaeological sites will be filed with the South Carolina Institute of Archaeology and Anthropology. Field notes from the project have been prepared for curation using archival standards and will be transferred to that agency as soon as the project is complete. Photographic materials are either digital and are not archival – they are being retained by Chicora Foundation.

Should materials be recovered requiring analysis that work will follow professionally accepted standard with a level of intensity suitable to the quantity and quality of the remains.

In general, the temporal, cultural, and typological classifications of prehistoric materials are defined by such authors as Coe (1964), Yohe (1996), Blanton et al. (1986), and Oliver et al. (1986). Historic materials, generally late nineteenth or early twentieth century, are generally classified using such authors as Jones and Sullivan (1980) for glass and Adams (1980), Bartovics (1978), and Price (1979) for ceramics.

Results

The archaeological survey of the parcel failed to identify any remains. The 27 shovel tests revealed relatively deep deposits when they were in ridge areas, but truncated soils when they fell into trough areas. All of the soils evidenced reduced chemistry, with gray loams on top of dense clay. Soils were damp throughout the testing area, although it had been several weeks since there was rain. There was also evidence of bark and other organic material in the tests, probably as a result of mechanical soil preparation.

No standing structures not previously surveyed were identified. We confirmed that the two closest structures, 250-0009 and 250-0012, were no longer present.

Conclusions

This study involved the examination of a substation lot and access road together accounting for about 5.5 acres. This report, conducted for Mr. Tommy Jackson of Central Electric Power Cooperative, provides the results of the investigation and is intended to assist the company comply with their historic preservation responsibilities.

The South Carolina Department of Archives and History GIS was consulted to check for any NRHP buildings, districts, structures, sites, or objects in the study area. No properties in or near the project area have been determined eligible for the National Register of Historic Places. Likewise, previous archaeological studies failed to identify any cultural resources within the 100 foot APE.

The current field studies found no archaeological sites within the corridor.

No standing structures were identified by this survey. Moreover, the presence of the existing substation and an adjacent county refuse/recycling property have already impacted the visual setting.

It is possible that archaeological remains may be encountered in the area during construction. As always, the utility's contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

Sources Cited

Adams, William H. (editor)
1980 *Waverly Plantation: Ethno-archaeology of a Tenant Farming Community*. Resource Analysts, Bloomington, Indiana.

Anderson, David G.
1979 Excavations at Four Fall Line Sites: the Southeastern Beltway Project. Commonwealth Associates, Inc., Jacksonville, Michigan. Submitted to the South Carolina Department of Highways and Public Transportation, Columbia.

Anderson, David G., Charles E. Cantley, and A. Lee Novick
1982 *The Mattassee Lake Sites: Archaeological Investigations Along the Lower Santee River in the Coastal Plain of South Carolina.* Commonwealth Associates, Jackson, Michigan.

Barry, John M.
1980 *Natural Vegetation of South Carolina*. University of South Carolina Press, Columbia.

Bartovics, Albert
1978 The Archaeology of Daniels Village: An Experiment in Settlement Archaeology. Ms. on file, Department of Anthropology, Brown University, Providence, Rhode Island.

Blanton, Dennis B., Christopher T. Espenshade, and Paul E. Brockington, Jr.
1986 *An Archaeological Study of 38SU83: A Yadkin Phase Site in the Upper Coastal Plain of South Carolina.* Garrow and Associates, Inc., Atlanta.

Braun, Lucy E.
1950 *Deciduous forests of Eastern North America.* Reprinted. The Free Press, New York.

Cable, John
1991 *Archaeological Test Excavations on the Northeastern Perimeter of the Buck Hall Site (38CH644), Francis Marion National Forest, South Carolina*. New South Associates, Irmo, South Carolina.

Caldwell, Joseph R.
1958 *Trend and Tradition in the Prehistory of the Eastern United States.* Memoirs of the American Anthropological Association 88.

Calhoun, Jeanne
1983 *The Scourging Wrath of God: Early Hurricanes in Charleston, 1700-1804.* Leaflet No. 29. The Charleston Museum, Charleston, South Carolina.

Coclanis, Peter A.
1989 *The Shadow of a Dream: Economic Life and Death in the South Carolina Low Country 1670-1920.* Oxford University Press, New York.

Coe, Joffre
1964 *The Formative Cultures of the*

Carolina Piedmont. Transactions of the American Philosophical Society 54(5).

Coon, David L.
1972 *The Development of Market Agriculture in South Carolina.* Ph.D. dissertation, University of Illinois. University Microfilms, Ann Arbor.

DeBow, J.D.B.
1854 *Statistical View of the United States.* A.O.P. Nicholson, Washington, D.C.

Dunbar, Gary S.
1961 Colonial Carolina Cowpens. *Agricultural History* 35:125-130.

Federal Power Commission
1977 *Final Environmental Impact Statement – Santee-Cooper Project No. 199 – South Carolina.* Federal Power Commission, Washington, D.C.

Ferguson, Leland G.
1971 *South Appalachian Mississippian.* Ph.D. dissertation, University of North Carolina, Chapel Hill. University Microfilms, Ann Arbor, Michigan.

Goodyear, Albert C., John H. House, and Neal W. Ackerly
1979 *Laurens-Anderson: An Archaeological Study of the Inter-Riverine Piedmont*. Anthropological Studies 4, Occasional Papers of the Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Gunn, Victoria Reeves
1976 Hofwyl Plantation. Ms. on file, Georgia Department of Natural Resources, Atlanta.

Hanson, Glen T., Jr.
1982 The Analysis of Late Archaic-Early Woodland Adaptive Change Along the Middle Savannah River: A Proposed Study. *South Carolina Institute of Archaeology and Anthropology Notebook* 14:1-38.

Hewat, Alexander D.
1836 An Historical Account of the Rise and Progress of the Colonies of South Carolina and Georgia (1779). In *Historical Collections of South Carolina*, edited by B.R. Carroll. Harper & Brothers, New York.

Hilliard, Sam B.
1984 *Atlas of Antebellum Southern Agriculture.* Louisiana State University Press, Baton Rouge.

Jones, Olive and Catherine Sullivan
1985 *The Parks Canada Glass Glossary*. Studies in Archaeology, Architecture and History, National Historic Parks and Sites Branch, Parks Canada, Ottawa.

Long, Bobby M.
1980 *Soil Survey of Berkeley County, South Carolina.* U.S.D.A., Soil Conservation Service, Washington, D.C.

Mathews, Maurice
1954 A Contemporary View of Carolina in 1686. *South Carolina Historical Magazine* 55:153-159.

Mathews, Thomas, Frank Stapor, Jr., Charles Richter, John Miglarese, Michael McKenzie, and Lee Barclay
1980 *Ecological Characterization of the Sea Island Region of South Carolina and Gerogia,* volume 1.

Office of Biological Services, United States Fish and Wildlife Service, Washington, D.C.

Meriwether, Robert L.
1940 *The Expansion of South Carolina 1729-1765.* Southern Publishers, Kingsport, Tennessee.

Michie, James
1977 *The Late Pleistocene Human Occupation of South Carolina.* Unpublished Honor's Thesis, Department of Anthropology, University of South Carolina, Columbia.

Mills, Robert
1972 [1826] *Statistics of South Carolina.* Reprinted. The Reprint Press, Spartanburg, South Carolina.

Morgan, Phillip D.
1977 *The Development of Slave Culture in Eighteenth Century Plantation America.* Ph.D. dissertation. University College, London.

1980 A Profile of a Mid-Eighteenth Century South Carolina Parish: The Tax Return of St. James', Goose Creek. *South Carolina Historical Magazine* 81:51-65.

Oliver, Billy L.
1981 *The Piedmont Tradition: Refinement of the Savannah River Stemmed Point Type*. Unpublished Master's Thesis, Department of Anthropology, University of North Carolina, Chapel Hill.

Oliver, Billy L., Stephen R. Clagett, and Andrea Lee Novick
1986 Lithic Analysis. In *Indian and Freedmen Occupation at the Fish Hall Site (38BU805), Beaufort County, South Carolina,* edited by Michael Trinkley, pp. 183-207. Research Series 1. Chicora Foundation, Inc., Columbia.

Phelps, David S.
1983 Archaeology of the North Carolina Coastal Plain: Problems and Hypotheses. In *The Prehistory of North Carolina: An Archaeological Symposium,* edited by Mark A. Mathis and Jeffrey J. Crow, pp. 1-52. North Carolina Division of Archives and History, Department of Cultural Resources, Raleigh.

Preservation Consultants
1989 *Berkeley County Historical and Architectural Survey - Survey Report*. Preservation Consultants, Charleston.

Preservation Consultants and David Stockton
1990 *Historic Resources of Berkeley County, South Carolina*. Preservation Resources, Charleston.

Price, Cynthia R.
1979 *19th Century Ceramics in the Eastern Ozark Boarder Region.* Monograph Series 1. Center for Archaeological Research, Southwest Missouri University, Springfield.

Ryan, Thomas M.
1972 *Archaeological Survey of the Columbia Zoological Park, Richland and Lexington Counties, South Carolina*. Research Manuscript Series 37. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Sassaman, Kenneth E., Mark J. Brooks, Glen T.

Hanson, and David G. Anderson
1990 *Native American Prehistory of the Middle Savannah River Valley*. Savannah River Archaeological Research Papers 1. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Sellers, Leilla
1934 *Charleston Business on the Eve of the American Revolution.* University of North Carolina Press, Chapel Hill.

Service, E.M.
1966 *The Hunters*. Prentice-Hall, Englewood Cliffs.

Sirmans, M. Eugene
1966 *Colonial South Carolina: A Political History 1663-1763.* University of North Carolina Press, Chapel Hill.

South, Stanley A.
1976 An Archaeological Survey of Southeastern North Carolina. *South Carolina Institute of Archaeology and Anthropology Notebook* 93.

1977 *Method and Theory in Historical Archaeology.* Academic Press, New York.

Stoltman, James B.
1974 *Groton Plantation: An Archaeological Study of a South Carolina Locality.* Monographs of the Peabody Museum 1, Harvard University, Cambridge.

Stoney, Samuel Gaillard
1938 *Plantations of the South Carolina Low Country.* Carolina Art Association, Charleston, South Carolina.

Taylor, Richard L. (editor)
1984 *Cultural Resources Survey of the Proposed Pee Dee Electric Generating Facility in Florence County, South Carolina*. Commonwealth Associates, Jackson, Michigan.

Townsend, Jan, John H. Sprinkle, Jr., and John Knoerl
1993 *Guidelines for Evaluating and Registering Historical Archaeological Sites and Districts.* Bulletin 36. National Park Service, National Register of Historic Places, Washington, D.C.

Trinkley, Michael
1980a *Additional Investigations at 38LX5*. South Carolina Department of Highways and Public Transportation, Columbia.

1980b *Investigation of the Woodland Period along the South Carolina Coast.* Ph.D. dissertation. Department of Anthropology, University of North Carolina, Chapel Hill.

1990 *An Archaeological Context for the South Carolina Woodland Period*. Chicora Foundation Research Series 22. Chicora Foundation, Inc., Columbia, S.C.

Trinkley, Michael, Debi Hacker, and Natalie Adams
1993 *Life in the Pee Dee: Prehistoric and Historic Research on the Roche Carolina Tract, Florence County, South Carolina*. Research Series 39. Chicora Foundation, Inc., Columbia.

Ver Steeg, Clarence L.
1975 *Origins of a Southern Mosaic.* University of Georgia Press, Athens.

Vivian, Daniel J.
2001 *South Carolina Statewide Survey of Historic Properties.* State Historic Preservation Office, Columbia.

Walker, Legare
1941 *Dorchester County.* Charleston.

Walthall, John A.
1980 *Prehistoric Indians of the Southeast: Archaeology of Alabama.* University of Alabama Press, University.

Ward, Trawick
1978 *The Archaeology of Whites Creek, Marlboro County, South Carolina*. Research Laboratories of Anthropology, University of North Carolina, Chapel Hill.

1983 Whites Creek: The Second Time Around. *South Carolina Antiquities* 15:63-65.

Waterhouse, Richard
1975 England, the Caribbean, and the Settlement of Carolina. *Journal of American Studies* 9:259-281.

Williams, Stephen B., editor
1965 *The Paleo-Indian Era: Proceedings of the 20th Southeastern Archaeological Conference*. Bulletin 2. Southeastern Archaeological Conference.

Wood, Peter
1974 *Black Majority.* W.W. Norton, New York.

Yohe, Robert M., II
1996 Analysis of Flaked Stone Artifacts. In *Archaeological Laboratory Methods: An Introduction,* edited by Mark Q. Sutton and Brooke S. Arkush, pp. 39-68. Kendall/Hunt Publishing, Dubuque, Iowa.

Von Loewe, Pete, Pat Hendrix, and Eric Poplin
1999 *Cultural Resources Inventory of the Skatell Tract, Berkeley County, South Carolina.* Brockington and Associates, Charleston.

Williams, Stephen B. (editor)
1965 *The Paleo-Indian Era: Proceedings of the 20th Southeastern Archaeological Conference.* Bulletin 2. Southeastern Archaeological Conference.

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